

18 H. P. LIGHT TOURING CAR.

Entirely New Model, with luxurious side entrance body, \$1750. New Electric Victoria-Phaeton, - \$1350 Light Electric Runabout, - - \$900

See these and other Columbias at the Show, Madison Square Garden-Main Floor, Centre Alsie. MADE BY

### ELECTRIC VEHICLE COMPANY

HARTFORD, CONN. New York Salesrooms. 134, 136, 138 West 39th St.

## Panhard & Levassor

beg to announce that they will exhibit on their stand at Madison Square Garden Show (Restaurant), from January 14th to January 21st,

# The Vanderbilt Cup

Mr. GEORGE HEATH On Long Island, October 8, 1904.

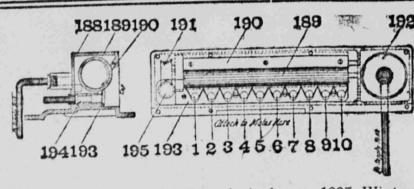
## PANHARD & LEVASSOR

230=232 West 13th Street. Telephone 316-317 Chelsea.

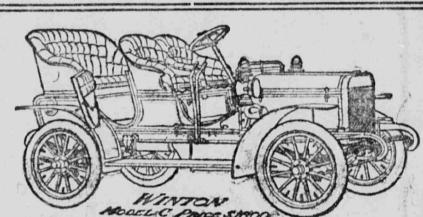
ROWING PROSPECTS AT YALE.

TOO MICH EFF CONSIDERED THE ONLY DRAWBACK.

Conclete Gendent of Turning Out a Winning Agreement of the Construction of



Absolutely **Automatic** Oiling System



This oiler is used exclusively on 1905 Winton vertical four-cylinder motors.

Lubricating oil from reservoir above cylinders flows by gravity to float chamber (192), which maintains a constant level. Then it passes into the main chamber (under 189 and 190), where the aluminum roller (189) picks up an endless film of oil. Passing the regulating scraper (190), which keeps the film always uniform in quantity, the oil is taken from the roller by scraper (193) and distributed in equal quantity to cylinders, all crank shaft and connecting rod bearings and pinion shaft and rear axle bearings, through tubes (1 to 10).

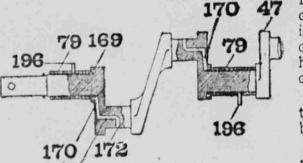
The roller (189) is driven by motor through worm gear (195). When motor starts, lubrication starts. When motor stops, lubrication stops.

Oil feed always in exact proportion to motor speed. Oil cannot siphon and flood motor or foul spark plugs.

Reservoir and oiler attached to motor; hence motor's warmth keeps oil constantly fluid. No sight oil feeds to tinker with. No choked needle valves. No springs to break. No valves to go wrong. No pressure to fail. No "splash lubrication" that always creates either a feast or a famine. Operator has merely to fill reservoir, the Winton oiler does the rest.

### ABSOLUTELY AUTOMATIC, SIMPLE, RELIABLE.

All motors depending upon splash lubrication have, under the cylinders, a supposedly oil and air tight crank case. Bottom of crank case is an inch or two below the lowest point of connecting rod travel. Connecting rods are attached to crank shaft. They support the pistons in the cylinders. Lubricating oil, to a depth of three inches or so, is dumped into the crank case. Theory is that as the connecting rods travel they strike the oil in the crank case and "splash feed" it to the bearings. Theory



is all right. System all right with stationary gas engines, where a leaky crank case can be quickly detected and where oil will remain at a constant level. But here is something to consider: In driving up hill what happens to the oil? Doesn't it flood the rear of crank case? Will it not flood the rear cylinders and cause foul spark plugs?

Or, let the car be driven down hill. Same thing happens to forward cylinders. Remember, too. that when one cylinder is flooded, the others are suffering from a total lack of lubrication. Result: Hot brasses and damaged bearings at one end and fouled spark plugs at the other.

There is no splash lubrication in the Winton. We do not depend upon chance oiling. All working parts—even the connecting rod bearings—are lubricated positively.

These bearings travel around a circuit and can be reached for positive lubrication only through the crank shaft. This is accomplished as follows: Oil is fed through tubes (No. 196) to stationary crank shaft bearings and is then directed through a spiral groove (169) to a small channel (170 and 171) bored through the centre of crank shaft. These channels terminate at the connecting rod bearings and constantly supply all the lubricant that is needed for these important points of friction.

Examine Winton Lubrication and other exclusive Winton features at the show right hand alsle, a little way from

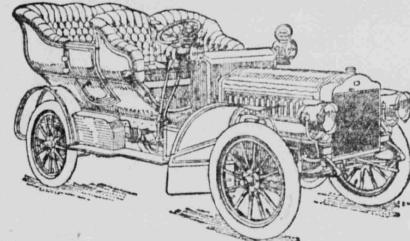
FIVE MODELS-All with Four Cylinder Vertical Motors. Model C . . 16-20 HP, \$1800 Model B . 24-30 HP, 2500 Model B Limoustne, 24-30 HP, 3500 Model A . 40-50 HP, 3500 Model A Limousine, 40-50 HP, 4500

New York Branch-BROADWAY @ 54th STREET The WINTON MOTOR CARRIAGE CO., Cleveland, Ohio, U.S. A.

### AUTOMOBILES Largest and most Reliable Exchange The Sensation of the Auto Show FIVE MODELS ON DISPLAY

The Beautiful Thomas Limousine 50 Horse, \$4,500

Telephone 3523-38.



40 Horse, \$3,000 50 Horse,

\$3,500 60 Horse, \$6,000

# THE THOMAS

On Exhibition in Section M

The Manufacturer,

E. R. THOMAS MOTOR CO., Buffalo, N. Y.

New York and Brooklyn Agent,

HARRY S. HOUPT.

Broadway & 48th Street, New York